

What is claimed is:

1. A polypeptide containing the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO:1, its amide or ester, or a salt thereof.
Jul 1
2. A polypeptide or its amide or ester, or a salt thereof, according to claim 1, wherein substantially the same amino acid sequence is represented by SEQ ID NO:8, SEQ ID NO:14, SEQ ID NO:18, SEQ ID NO:33 or SEQ ID NO:50.
3. A partial peptide of the polypeptide according to claim 1, or its amide or ester, or a salt thereof.
Jul 2
4. A partial peptide or its amide or ester, or a salt thereof, according to claim 3, comprising amino acid residues 81 (Met) to 92 (Phe) of SEQ ID NO:1.
5. A partial peptide or its amide or ester, or a salt thereof, according to claim 3, comprising amino acid residues 101 (Ser) to 112 (Ser) of SEQ ID NO:1.
6. A partial peptide or its amide or ester, or a salt thereof, according to claim 3, comprising amino acid residues 124 (Val) to 131 (Phe) of SEQ ID NO:1.
7. An amide of the partial peptide of the polypeptide according to claim 1, or a salt thereof.
8. A DNA containing a DNA bearing a base sequence encoding the polypeptide of claim 1.
9. A DNA according to claim 8 having the base sequence represented by SEQ ID NO:2, SEQ ID NO:9, SEQ ID NO:15, SEQ ID NO:19, SEQ ID NO:34 or SEQ ID NO:51.
10. A DNA containing a DNA encoding the partial peptide of claim 3.
11. A DNA according to claim 10, comprising bases 241 to 276 of the base sequence represented by SEQ ID NO:2.

12. A DNA according to claim 10, comprising bases 301 to 336 of the base sequence represented by SEQ ID NO:2.
13. A DNA according to claim 10, comprising bases 5 370 to 393 of the base sequence represented by SEQ ID NO:2.
14. A recombinant vector containing the DNA of claim 8 or claim 10.
15. A transformant transformed with the 10 recombinant vector of claim 14.
16. A method for manufacturing the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3, which 15 comprises culturing said transformant of claim 15 and producing and accumulating the polypeptide of claim 1 or the partial peptide of claim 3.
17. An antibody to the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the 20 partial peptide or its amide or ester, or a salt thereof according to claim 3.
18. A diagnostic composition comprising the DNA according to claim 8 or claim 10 or the antibody according to claim 17.
- 25 19. An antisense DNA having a complementary or substantially complementary base sequence to the DNA according to claim 8 or claim 10 and capable of suppressing expression of said DNA.
20. A composition comprising the polypeptide or 30 its amide or ester, or a salt thereof, according to claim 1 or the partial peptide, or its amide or ester, or a salt thereof, according to claim 3.
21. A pharmaceutical composition comprising the polypeptide or its amide or ester, or a salt thereof,

according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3.

22. A method for screening a compound that accelerates or inhibits the activity of the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3, which comprises using the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3.

23. A method for screening according to claim 22, wherein the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3 and a protein containing the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO:37, or a salt thereof, or the partial peptide or its amide or ester, or a salt thereof, are employed.

24. A kit for screening a compound that accelerates or inhibits the activity of the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3, comprising the polypeptide or its amide or ester, or a salt thereof, according to claim 1, or the partial peptide or its amide or ester, or a salt thereof, according to claim 3.

25. A kit for screening according to claim 24, comprising the polypeptide or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide or its amide or ester, or a salt thereof, according to claim 3 and a protein containing the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO:37 or the

partial peptide or its amide or ester, or a salt thereof.

26. A compound that accelerates or inhibits the polypeptide, or its amide or ester, or a salt thereof,
5 according to claim 1 or the partial peptide, or its amide or ester, or a salt thereof, according to claim 3, which is obtainable using the screening method according to claim 22 or the screening kit according to claim 24.

10 27. A pharmaceutical composition comprising a compound that accelerates or inhibits the polypeptide, or its amide or ester, or a salt thereof, according to claim 1 or the partial peptide, or its amide or ester, or a salt thereof, according to claim 3, which is obtainable using the screening method according to claim 22 or the screening kit according to claim 24.

15 28. A protein or a salt thereof containing the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO:37.

20 29. A protein or a salt thereof according to claim 28, wherein substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO:37 is the amino acid sequence represented by SEQ ID NO:54.

25 30. A partial peptide or its amide or ester, or a salt thereof, according to claim 28.

31. A DNA containing a DNA having a base sequence encoding the protein according to claim 28 or the partial peptide according to claim 30.

30 32. A DNA according to claim 31 having the base sequence represented by SEQ ID NO:38, SEQ ID NO:55 or SEQ ID NO:56.

33. A recombinant vector containing the DNA according to claim 31.

35 34. A transformant transformed with the recombinant vector according to claim 33.

35. A method for manufacturing the protein or a salt thereof according to claim 28 or the partial peptide or its amide or ester, or a salt thereof, according to claim 30, which comprises culturing the
5 transformant according to claim 34 and producing and accumulating the protein according to claim 28 or the partial peptide according to claim 30.

36. An antibody to the protein or a salt thereof according to claim 28 or the partial peptide or its
10 amide or ester, or a salt thereof, according to claim 30.

37. A diagnostic composition comprising the DNA according to claim 31 or the antibody according to
claim 36.

15 38. A ligand to the protein or a salt thereof according to claim 28, which is obtainable by using the protein or a salt thereof according to claim 28 or the partial peptide or its amide or ester or, a salt thereof, according to claim 30.

20 39. A method for determination of a ligand to the protein or a salt thereof according to claim 28, characterized by using the protein or a salt thereof according to claim 28 or the partial peptide or its amide or ester, or a salt thereof, according to claim
25 30.

40. A method for screening a compound that alters the binding property between a ligand and the protein or a salt thereof according to claim 28, which comprises using the protein or a salt thereof according to claim 28 or the partial peptide or its amide or ester, or a salt thereof, according to claim 30.
30

41. A kit for screening a compound that alters the binding property between a ligand and the protein or a salt thereof according to claim 28, comprising the
35 protein or a salt thereof according to claim 28 or the

partial peptide or its amide or ester, or a salt thereof, according to claim 30.

42. A compound that alters the binding property between a ligand and the protein or a salt thereof
5 according to claim 28, which is obtainable by using the screening method according to claim 40 or the screening kit according to claim 41.

43. A pharmaceutical composition comprising a compound that alters the binding property between a
10 ligand and the protein or a salt thereof according to claim 28, which is obtainable by using the screening method according to claim 40 or the screening kit according to claim 41.

44. A method for quantifying the protein or a salt
15 thereof according to claim 28, which comprises using the antibody of claim 36.